University of Alaska Board of Regents

Program Approval Summary Form

MAU: University of Alaska Southeast
Title and Brief Description: B.A. in Biology

The proposed Bachelor of Arts (B.A.) in Biology curriculum provides a solid foundation for students in biology with a liberal arts focus. The degree is appealing to those with interest in human dimensions of biological sciences and with an interest in teaching, policy, management, or administration. For example, the degree is ideal for middle-school and secondary-school teachers who require a content degree in addition to broad training in liberal arts and sciences. Students may wish to combine a minor, certificate program, A.A.S. or double major in order to suit their interests. The B.A. in Biology diversifies training opportunities for students at UAS without requiring additional new resources. Existing faculty, library, and other resources are sufficient to deliver this program, and it is anticipated that students could graduate with this new degree in 2008.

Target Admission Date: Fall 2006

Relation to Educational Mission of UAS

The Biology program has long been one of the flagship programs of UAS. Creating a second degree in Biology reinforces this position and reaches a broader audience of students. This new degree will help UAS to increase the number of Bachelor’s degrees granted from UAS. The B.A. in Biology furthers the following core values of the UAS mission:

- Achieving distinction as a learning community
- Developing programs rooted in its unique natural setting
- Contributing to the economic development of the region and the state through basic and applied research and public service
- Forging dynamic partnerships with other academic institutions, governmental agencies and private industry

State Needs Addressed by This Program

The continued success of the Marine Biology and Biology degrees at UAS demonstrate strong student interest in these fields at UAS. This new degree offers more flexibility to include study in other disciplines with a minor, certificate, or double major. Within the state of Alaska, there is a need for students to be broadly trained in natural resources because the majority of the income in the state is derived from natural resources. Jobs in many natural resource-related fields do not require the rigor of a B.S. degree and are better suited to a B.A. degree in Biology with breadth in other areas. The degree is well suited for individuals who wish to pursue an advanced degree in social science, humanities, or business, such as marine policy, natural resource management, fishery economics, public health administration, all fields that are needed within the state.

Student Opportunities

As of Fall 2005, there are 51 active majors (upper division students) in the B.S. in Biology and Marine Biology and 143 pre-majors (lower division students), totaling almost 200 majors and
pre-majors in Biology and Marine Biology at UAS. While UAS is a small school, its enrollment in Biology programs rivals that found at a much larger school, such as UAF which has 300 students enrolled in biological sciences programs. The B.A. in Biology will improve the success rate of the transition from pre-major to major in the Biology program at UAS.

Presented in the table below are estimates of Bachelor’s degrees awarded at UAS. In 2003-2004 92 Bachelor’s degrees were awarded at UAS and 13 (14.1%) of these were in Biology and Marine Biology. (Note that the B.S. in Marine Biology was just approved by BOR in 2004.) We anticipate that students will be able to convert from the existing B.S. in Biology to this new degree in their sophomore or junior year and therefore graduate with this degree the year after it is instituted. However we do not anticipate seeing increases in the total number of Bachelor’s degrees in Biology until the degree has been in place long enough for a new cohort to complete the program in 4-5 years.

Table 1. Current and projected degrees awarded in Biology programs at UAS (Juneau campus).

Note that projections are conservative

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<td>94</td>
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<td>102</td>
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<td>7</td>
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<td>B.A. Biology degree</td>
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**Student Outcomes**

It is the objective of the B.A. in Biology program to produce graduates that: (1) have an technical knowledge of the life sciences; (2) are capable of entering a variety of life science fields; (3) are capable of participating in biological research projects; and (4) are capable of working in a professional environment. In keeping with these objectives, the expected outcome of the B. A. in Biology program is that graduates will have ability to: (1) use advanced methods of analysis; (2) understand advanced biological concepts; (3) understand advanced scientific theory; (4) integrate advanced technical information from life science disciplines; (5) manage projects and function in a professional environment.

**Enrollment Projections**

It is anticipated that with this new degree in Biology UAS will be able to increase the retention rate of current students and recruit additional students. This degree gives UAS science majors more options if they do not wish to pursue graduate science degrees. It is directed to retain students for a variety of life science fields, including secondary MAT candidates.

**Research Opportunities**

Students may participate in ongoing research with Biology faculty; however students interested in research are advised to pursue a B.S. in Biology or Marine Biology.

**Fiscal Plan for Development and Implementation**

Since the proposed B.A. in Biology is derived from the B. S. in Biology, no additional resources will be required to develop or implement the program. Faculty are in place, labs are available and equipment is operating at this time.